

Refine Search

Search Results -

Terms	Documents
L1.clm. and (configur\$5 same multiplex\$3).clm.	6

Database:

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Search:

L3

Search History

DATE: Thursday, June 22, 2006 [Printable Copy](#) [Create Case](#)

Set Name Query

side by side

Hit Count Set Name

result set

DB=PGPB; PLUR=YES; OP=OR

<u>L3</u>	11.clm. and (configur\$5 same multiplex\$3).clm.	6	<u>L3</u>
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<u>L2</u>	11 and (configur\$5 same multiplex\$3)	44	<u>L2</u>
-----------	--	----	-----------

<u>L1</u>	"first bus" same "second bus" same multiplex\$3	96	<u>L1</u>
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END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
"first bus" same "second bus" same multiplex\$3	351

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Search:

L1

Refine Search

Recall Text

Clear

Interrupt

Search History

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Set Name Query

side by side

Hit Count Set Name

result set

DB=PGPB,USPT,USOC; PLUR=YES; OP=OR

L1 "first bus" same "second bus" same multiplex\$3 351 L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
"first bus" same "second bus" same multiplex\$3	46

Database:

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Search:

L2

Refine Search

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Interrupt

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Set Name Query

side by side

Hit Count Set Name

result set

*DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR*L2 "first bus" same "second bus" same multiplex\$3

46

L2*DB=PGPB,USPT,USOC; PLUR=YES; OP=OR*L1 "first bus" same "second bus" same multiplex\$3

351

L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
(709/253 713/1 713/323 716/12 370/464 370/362 370/364 370/357 370/916 712/29 710/316 710/302 710/303 710/304 710/104 710/72 710/305 710/107 710/307 710/317 710/37).ccls.	10927

Database:

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Search:

L3

Refine Search

Recall Text

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Interrupt

Search History

 DATE: Thursday, June 22, 2006 [Printable Copy](#) [Create Case](#)

Set
Name Query
 side by
 side

Hit
Count
Set
Name
 result
 set

DB=PGPB,USPT,USOC; PLUR=YES; OP=OR

L3 710/316,302-
 304,104,72,305,107,307,317,37;713/1,323;370/464,362,364,357,916;712/29;709/253;716/12.ccls.

10927 L3

DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

L2 "first bus" same "second bus" same multiplex\$3

46 L2

DB=PGPB,USPT,USOC; PLUR=YES; OP=OR

L1 "first bus" same "second bus" same multiplex\$3

351 L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L4 and (configur\$5 same multiplex\$3)	23

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Search:

L5

Refine Search

Recall Text

Clear

Interrupt

Search History

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[Set](#)
[Name Query](#)
 side by
 side

[Hit](#)
[Count](#) [Set](#)
 result
 set

DB=PGPB,USPT,USOC; PLUR=YES; OP=OR
L5 L4 and (configur\$5 same multiplex\$3)
23 L5
L4 11 and L3
59 L4
L3 710/316,302-

304,104,72,305,107,307,317,37;713/1,323;370/464,362,364,357,916;712/29;709/253;716/12.ccls.

10927 L3
DB=EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR
L2 "first bus" same "second bus" same multiplex\$3
46 L2
DB=PGPB,USPT,USOC; PLUR=YES; OP=OR
L1 "first bus" same "second bus" same multiplex\$3
351 L1

END OF SEARCH HISTORY

EAST - [Untitled1:1]

File View Edit Tools Window Help

Drafts

Pending

Active

L1: (254) "first bus" same

L2: (96) 11 and (configur\$5 same multiplex\$5)

L3: (24) 11 same (configur\$5 same multiplex\$5)

Failed

Saved

Favorites

Tagged (0)

UDC

Queue

Trash

Search List Show Queue Clear

DBs USPAT

Default operator: OR

Plurals

Highlight all hit terms initially

BRS form IS&R form Image Text HTML

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comment	Error	Definit	Er
1	BRS	L1	254	"first bus" same	USPA	2006/06/2				
				"second bus" same mul	T	2 14:07				
2	BRS	L2	96	11 and (configur\$5	USPA	2006/06/2				
				same multiplex\$5)	T	2 14:08				
3	BRS	L3	24	11 same (configur\$5	USPA	2006/06/2				
				same multiplex\$5)	T	2 14:08				

Start

EAST - [...]

EAST - [Untitled1:1]

File View Edit Tools Window Help

☐ Drafts
☐ Pending
☒ Active
 L1: (254) "first bus" s
 L2: (96) 11 and (confi
 L3: (24) 11 same (confi
☐ Failed
☐ Saved
☐ Favorites
☐ Tagged (0)
☐ UDC
☐ Queue
☐ Trash

Search
 DBs: ☒ Plurals
 Default operator: ☒ Highlight all hit terms initially

11 same (configur\$5 same multiplex\$5)

	U	1	Document ID	Issue Dat	Pages	Title	Current OR	Current X
1	<input type="checkbox"/>	<input type="checkbox"/>	US 6977520	20051220	14	Time-multiplexed	326/38	326/46
2	<input type="checkbox"/>	<input type="checkbox"/>	US 6934781	20050823	17	routing in a programmab	710/118	370/447;
3	<input type="checkbox"/>	<input type="checkbox"/>	US 6898730	20050524	10	System and method for	714/7	710/116
4	<input type="checkbox"/>	<input type="checkbox"/>	US 6877060	20050405	11	effectively performing	714/7	714/43
5	<input type="checkbox"/>	<input type="checkbox"/>	US 6836106	20041228	10	System and method for	710/310	710/105;
6	<input type="checkbox"/>	<input type="checkbox"/>	US 6816955	20041109	26	fail-over switching in	710/310	710/56
7	<input type="checkbox"/>	<input type="checkbox"/>	US 6781590	20040824	96	Dynamic delayed	324/100	324/763;
8	<input type="checkbox"/>	<input type="checkbox"/>	US 6748469	20040608	9	transaction buffer conf	324/100	324/765
9	<input type="checkbox"/>	<input type="checkbox"/>	US 6633944	20031014	11	Apparatus and method	711/168	365/230.0
10	<input type="checkbox"/>	<input type="checkbox"/>	US 6573749	20030603	11	for testing semiconduct	711/168	;
11	<input type="checkbox"/>	<input type="checkbox"/>	US 6463489	20021008	16	Logic for providing	345/538	345/559;
						arbitration for synchro	710/71	345/589
						Graphic processing	710/71	710/313
						system having bus conn	710/306	370/402;
						Parallel/serial SCSI	326/41	710/100;
						with legacy support	708/232	710/240
						AHB segmentation bridge		
						between busses having d		
						Method and apparatus		
						for incorporating a mul		
						System and method for		



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IEEE JNL IEEE Journal or Magazine

IEEE JNL IEE Journal or Magazine

IEEE CNF IEEE Conference Proceeding

IEEE CNF IEE Conference Proceeding

IEEE STD IEEE Standard

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» Key

IEEE JNL IEEE Journal or Magazine

IEEE JNL IEE Journal or Magazine

IEEE CNF IEEE Conference Proceeding

IEEE CNF IEE Conference Proceeding

IEEE STD IEEE Standard

view selected items[Select All](#) [Deselect All](#)**1. Hardware support: a cache lock mechanism without retry**

Chuleui Hong; Kyeongmo Park; Yeong-Tae Song;

Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing, 2005 and First ACIS International Workshop on Self-Assembling Wireless Networks, SNPD/SAWN 2005, Sixth International Conference on
 23-25 May 2005 Page(s): 44 - 49

Digital Object Identifier 10.1109/SNPD-SAWN.2005.41

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Hardware support: a cache lock mechanism without retry

Chuleui Hong, Kyeongmo Park, Yeong-Tae Song,
Software Sch., Sangmyung Univ., Seoul, South Korea

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Abstract

A lock mechanism is essential for synchronization on the multiprocessor systems. The conventional queuing lock has **two bus** traffics that are the initial and retry of the lock-read. This paper proposes the new locking protocol, called WPV (waiting processor variable) lock mechanism, which has only one lock-read bus traffic command. The WPV mechanism accesses the shared data in the initial lock-read phase that is held in the pipelined protocol until the shared data is transferred. The WPV mechanism also uses the cache state lock mechanism to reduce the locking overhead and guarantees the FIFO lock operations in the multiple lock contentions. In this paper, we also derive the analytical model of WPV lock mechanism as well as conventional memory and cache queuing lock mechanisms. The simulation results on the WPV lock mechanism show that about 50% of access time is reduced comparing with the conventional queuing lock mechanism.

Index Terms

inspec

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Author Keywords

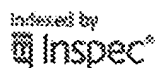
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